Reg No.:_____   Name:_____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
THIRD SEMESTER B.TECH DEGREE EXAMINATION(S), MAY 2019

Course Code: EE207

Course Name: COMPUTER PROGRAMMING

Max. Marks: 100   Duration: 3 Hours

PART A
Answer all questions, each carries 5 marks.   Marks

1	Which are the logical operators used in C language. Explain with example.	(5)
2	With suitable example explain the syntax of switch -case statement in C language.	(5)
3	Write a C program to read an array of integers and search for the occurrence of a given value.	(5)
4	What is the use of a static variable? Explain with example.	(5)
5	Define a structure and union with following as members - an integer variable, a character array having 20 characters, and a floating point variable. How many bytes are allotted for each? Illustrate and explain.	(5)
6	Write a C program to swap two variables using pointers.	(5)
7	Which are the different options for opening a file in C. Explain any four with example.	(5)
8	What are the advantages of Python as a programming language? Write a Python program to find the larger of two numbers.	(5)

PART B
Answer any two full questions, each carries 10 marks.

9	a)	Write an algorithm and draw flow chart for finding the number of numbers divisible by 3 between 100 and 200.	(10)
10	a)	Which are the basic data types in C language? How the memory allocation is done for each data type.	(5)
	b)	Write a C program to swap two numbers without using third variable	(5)
11	a)	Write a C program to find the sum of the digits of a number.	(5)
	b)	Write a C program to print first 10 numbers of Fibonacci series.	(5)

PART C
Answer any two full questions, each carries 10 marks.

12	a)	Give the syntax and example for two methods of reading a string.	(4)
	b)	Write a C program for multiplication of two matrices.	(6)
13	a)	Write a C program to read a string and check whether it is palindrome or not.	(5)
	b)	What are the advantages of recursive function? Write a recursive function using C to find the factorial of a number.	(5)

14   a)   What are the advantages of functions? Explain how it is implemented in C Language.   (4)

      b)   Write a C program to prepare a rank list based on marks for five subjects, using three   (6) separate functions to read the marks, prepare rank list and print the same.

PART D
Answer any two full questions, each carries 10 marks.

15   a)   Differentiate between '&' operator and '*' operator in C with help of a suitable   (3) example.

      b)   Write a C program to sort an array of integers using pointers.   (7)

16   a)   Write a C program to accept a string using pointers and print the third character of the   (3) same.

      b)   Write a C program to read and write 10 integers to a file *number.txt*, open the file and   (7) copy the odd numbers to *odd.txt* and even numbers to *even.txt*.

17   a)   Write a Python program to print the sum and product of two real numbers.   (5)

      b)   Write a Python program to concatenate two strings.   (5)

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